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10/756,790	01/13/2004	Thomas Arnold Anschutz	030408 (9400-62)	2954

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EXAMINER	
ALAM, UZMA	
ART UNIT	**PAPER NUMBER**
2457	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/756,790	ANSCHUTZ ET AL.	
	Examiner	Art Unit	
	UZMA ALAM	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/5/2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/13/04* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/5/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the arguments submitted February 5, 2010. Claims 1-55 are pending. Claims 1-55 represent a method, system and computer program product for modifying at least one of bandwidth and QoS for a user session in a network.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDysan et al. US Patent No. 7,046,680 in view of Paul et al. US Patent No. 7,185,070.

3. McDysan teaches the invention as claimed including a responding to packets requesting policy based services (see abstract).

4. Paul teaches the invention as claimed including a generic quality of service protocol (see abstract).

As per claim 1, McDysan teaches a method of modifying at least one of at least one of bandwidth and Quality of Service (QoS) for a user session in a network that comprises a Regional/Access Network (RAN) [MAN 16] that facilitates differentiated end-to-end data transport between a Network Service Provider (NSP) and an Application Service Provider (ASP)

and a Customer Premises Network (CPN) that includes Customer Premises Equipment (CPE), comprising:

receiving a request at at least one of at least one of the NSP and the ASP [programmable access device 40; column 5, lines 56-62] to change at least one of bandwidth and Qos associated with the user's session (RESV request for bandwidth; column 16, lines 59-64; column 17, lines 1-40); and

at least one of the NSP and the ASP to communicate with the RAN to modify the at least one of at least one of bandwidth and QoS associated with the user's session (policy server then makes….that control the functionality of PAD….via an API; column 6, lines 1-46).

McDysan does not teach using Application Programming Interface (API) calls to communicate with the RAN to modify the at least one of at least one of bandwidth and QoS associated with the user's session.

Paul teaches using Application Programming Interface (API) calls to communicate with the RAN to modify the at least one of at least one of bandwidth and QoS associated with the user's session. See column 1 lines 45-55; column 2, lines 36-40 ; and column 4 lines 33-65.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the communication of McDysan with the API calls of Paul. A person of ordinary skill in the art would have been motivated to do this to have the functionality to communicate over multiple protocols.

As per claim 2, McDysan and Paul teach the method of Claim 1, wherein receiving the request comprises: initiating the request at at least one of at least one of the NSP and the ASP to change at least one of the at least one of bandwidth and QoS associated with the user's session (McDysan: request bandwidth change by sending a RESV message to PAD; column 16, line s1-46)

As per claim 3, McDysan and Paul teach the method of Claim 1, wherein receiving the request comprises: receiving the request at at least one of at least one of the NSP and the ASP from a user to change the at least one of at least one of bandwidth and QoS associated with the user's session (McDysan: request bandwidth change by sending a RESV message to PAD; column 16, lines 1-46; Figure 6; column 29, lines 64-67; column 30, lines 1-32).

As per claim 4, McDysan and Paul teach the method of Claim 3, wherein the QoS associated with the user's session is scheduling resources (McDysan: establishing customer flow; column 17, lines 21-35).

As per claim 5, McDysan and Paul teach the method of Claim 4, wherein using the API comprises: sending a query from at least one of the NSP and the ASP to the RAN to obtain a at least one of bandwidth range and QoS capabilities from the RAN (McDysan: query policy server; column 17, lines 18-23).

As per claim 6, McDysan and Paul teach the method of Claim 5, further comprising: presenting to the user via the ASP and at least one of the NSP at least one at least one of bandwidth/QoS option within the at least one of bandwidth range and QoS capabilities received from the RAN (McDysan: sending a resvy packet to the user; column 17, lines 1-40).

As per claim 7, McDysan and Paul teach the method of Claim 6, further comprising:

obtaining a user selection of one of the at least one at least one of bandwidth/QoS option at at least one of the NSP and the ASP (McDysan: column 17, lines 1-40); and

updating the RAN with information to provide the selected at least one of bandwidth/QoS option for the user's session (McDysan: column 17, lines 1-40).

As per claim 8, McDysan and Paul teach the method of Claim 7, further comprising: updating the CPE with the information to provide the selected at least one of bandwidth/QoS option for the user's session (McDysan: column 17, lines 1-40).

As per claim 9, McDysan and Paul teach the method of Claim 8, wherein updating the CPE with information comprises: sending an update session at least one of bandwidth info message and a QoS-related message from the RAN to the CPE that contains a request for changing the at least one of bandwidth/QoS associated with the user's session to the selected at least one of bandwidth option in the CPE (McDysan: column 17, lines 1-40).

As per claim 10, McDysan and Paul teach the method of Claim 9, wherein updating the RAN with information further comprises: updating a rate limit and QoS associated with a communication queue in the RAN that is used to process traffic associated with the user's session (McDysan: column 17, lines 1-40).

As per claim 11, McDysan and Paul teach the method of Claim 7, wherein updating the RAN with information comprises: sending a change session at least one of bandwidth request message from at least one of the NSP and the ASP to the RAN that contains a request for changing the at least one of bandwidth associated with the user's access session to the selected at least one of bandwidth option in the RAN (McDysan: column 17, lines 1-40).

As per claim 12, McDysan and Paul teach the method of Claim 11, further comprising: sending a change session at least one of bandwidth response message from the RAN to at least one of the NSP and the ASP that contains an acknowledgement for the change session at least one of bandwidth request message (McDysan: column 11, lines 25-67;column 17, lines 1-40).

As per claim 13, McDysan and Paul teach the method of Claim 11, wherein updating the RAN with information further comprises: updating a rate limit associated with a communication queue in the RAN that is used to process traffic associated with the user's session (McDysan: column 11, lines 25-37).

As per claim 14, McDysan and Paul teach the method of Claim 5, further comprising: authenticating at least one of the NSP and the ASP with the RAN prior to sending the query from at least one of the NSP and the ASP to the RAN (McDysan: column 17, lines 1-40).

As per claim 15, McDysan and Paul teach the method of Claim 14, wherein authenticating at least one of the NSP and the ASP with the RAN comprises:
sending an establish service session request message from at least one of the NSP and the ASP to the RAN that contains an identification of at least one of the NSP and the ASP and authorization credentials (McDysan: column 22, lines 1-67; column 27, lines 64-67; column 28, lines 1-32); and

sending an establish service session response message from the RAN to at least one of the NSP and the ASP that contains an authentication result (McDysan: column 19, lines 24-67; column 20; column 21, lines 1-35; Figures 7B-7E).

As per claim 16, McDysan and Paul teach the method of Claim 5, wherein sending the query comprises: sending a query session at least one of bandwidth request message from at least one of the NSP and the ASP to the RAN that contains a request for at least one of bandwidth information associated with the user's session (McDysan: column 17, lines 1-40); and

sending a query session at least one of bandwidth response message including scheduling resources from the RAN to at least one of the NSP and the ASP that contains the at least one of bandwidth range (McDysan: column 17, lines 1-40).

As per claim 17, McDysan and Paul teach the method of Claim 1, wherein the request is a first request, the method further comprising:

updating the RAN and the CPE with information to modify the at least one of bandwidth and QoS associated with the user's session (McDysan: column 16 ,lines 59-67);

then receiving a second request at at least one of the NSP and the ASP to delete or change at least one of bandwidth and QoS associated with the user's session (McDysan: column 17, lines 1-40); and

using API calls at at least one of the NSP and the ASP to communicate with the RAN to change the at least one of bandwidth and QoS associated with the user's session to a default value in the RAN (McDysan: column 5, lines 56-62; column 6, lines 1-46).

As per claim 18, McDysan and Paul teach the method of Claim 1, wherein the RAN comprises a Broadband Remote Access Server (BRAS) (McDysan: column 5, lines 39-40).

1. Claims 19-36 and 37-54 are rejected under the same rationale as claims 1-18 because they teach the system and computer program product of the method of claims 1-18.

As per claim 55, McDysan and Paul teach a method of modifying at least one of bandwidth and Quality of Service (QoS) for a user session in a network that comprises a Regional/Access Network (RAN) that facilitates differentiated end-to-end data transport between

a Network Service Provider (NSP) and an Application Service Provider (ASP) and a Customer Premises Network (CPN) that includes Customer Premises Equipment (CPE), comprising:

receiving a request at at least one of the NSP and the ASP [PAD 40] to change at least one of bandwidth and QoS associated with the user's session (McDysan: RESV request for bandwidth; column 16, lines 59-64; column 17, lines 1-40); and

using messaging interface calls at at least one of the NSP and the ASP to communicate with the RAN to modify the at least one of bandwidth and QoS associated with the user's session (McDysan: policy server then makes….that control the functionality of PAD….via an API; column 6, lines 1-46).

Response to Arguments

2. Applicant's arguments with respect to claims 1-55 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UZMA ALAM whose telephone number is (571)272-3995. The examiner can normally be reached on Monday - Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam /U. A./
Examiner, Art Unit 2457
May 27, 2010

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457